THE CANCER LETTER

Vol. 13 No. 32
Aug. 7, 1987

Subscription: $160 year North America, $175 year elsewhere

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House Bill Gives NCI $135 Million Increase, NIH $846 Million More For FY 1988 Over 1987 Budgets

The House Appropriations Committee has approved a total of $1.542 billion for NCI in the 1988 fiscal year, an increase of $135 million over the current year's budget and $230 million more than requested by President Reagan. That figure, which includes $94 million for AIDS research, was

(Continued to page 2)

In Brief

Berlin Leaving Northwestern To Become Zubrod's Deputy at Miami; Four Center Director Jobs Open

NATHANIEL BERLIN is leaving his position as director of the Northwestern Univ. Cancer Center to join his former NCI colleague, **Gordon Zubrod**, at the Univ. of Miami Papanicolaou Cancer Center. Effective Sept. 1, Berlin will be Zubrod's deputy director and will be vice chairman of the Dept. of Oncology. Berlin and Zubrod left NCI in the mid-70s after serving as directors, respectively of the Div. of Cancer Biology & Diagnosis and Div. of Cancer Treatment. The move will reunite the first three NCI clinical directors, Zubrod, Berlin and Alfred Ketchum, who is chief of surgery at the Miami center. The vacancy at Northwestern brings the number of major cancer center director positions now vacant to four, with those at Hopkins, Duke and Georgetown. . . . **JUDITH STEIN**, who has been program director for the Cancer Information Service in NCI's Div. of Cancer Prevention & Control, will join the National Eye Institute Aug. 21 as information officer. Stein also has been serving as acting chief of the Health Promotion Sciences Branch and program director for cancer communications research. She has been at NCI since 1981. . . **PATRICK SMYTHE**, director of member services for the Materials Research Society in Pittsburgh, has been named deputy executive director of the Oncology Nursing Society. He will assist Executive Director Pearl Moore in the daily administration, long range planning, financial analysis and employee relations of the Society. . . . **FIRST ANNOUNCEMENT** of the 15th International Cancer Congress has been issued by the International Union Against Cancer (UICC). The Congress will be held Aug. 16-22 in Hamburg. To receive further details and announcements as they are issued, and a formal invitation to the Congress, write to 15th International Congress 1990, Hamburg Messe und Congress GmbH, Congress Organization, PO Box 302480, D-2000 Hamburg 36, Federal Republic of Germany.

Senate Action On Appropriations Bill Delayed Until After August Recess

(Continued from page 1)
part of the Depts. of Labor-Health & Human Services-Education appropriations bill reported out by the committee last week. The bill was tentatively scheduled to go to the full House later this week.

The Senate, meanwhile, headed into the August recess starting at the end of this week without any plans by the Labor-HHS-Education Appropriations Subcommittee to mark up its bill. Congress will be out until after Labor Day. Senate committee action on that bill probably will come soon after the recess ends.

Historically (at least since the National Cancer Act of 1971), the Senate increases NCI's appropriation over that in the House bill. The House figure usually can be considered the floor, the least NCI will receive. The amount in the House bill this time, certainly an improvement over the White House recommendation, still is more than $150 million under NCI's bypass budget request ($1.7 billion), and still would leave the Cancer Program short on the tools it needs to get going on the Year 2000 goals.

NCI executives were pouring over the House bill and committee report this week, attempting to determine how they will impact programs and paylines. They expect to have some estimates by next week.

They do not have much to go by in the commitee report in the way of directions specifically to NCI, but there are some significant directives aimed at NIH overall. Among these are:

<>The NIH budget--the committee gave NIH a total of $7.036 bill, including $472.4 million for AIDS research. All of the AIDS money for HHS, totaling $945.4 million, plus another $25 million for the Food & Drug Administration in another appropriations bill, was placed into one consolidated account in the office of the Secretary. The committee did break down the amount intended for each agency and institute, and provided that amounts could be reprogrammed with approval of the House and Senate Appropriations Committees.

The NIH AIDS money for each institute is identical to the requests by the White House. The committee added $50 million to the amount requested for the office of the NIH director. The total, $472.4 million, is an increase of $220 million over NIH AIDS money in the current fiscal year, demonstrating Congress' intense concern over the threat posed by AIDS.

The National Institute of Allergy & Infectious Diseases continues to be the lead institute for AIDS funding, with $223.3 million in the House bill, up from $145.9 million in the current year. The National Heart, Lung & Blood Institute follows with $94 million, up from $61.7 million in FT 1987.

A complete breakdown of AIDS allocations for NIH and the complete committee report on AIDS will appear in the August issue of **AIDS update.**

<>Total number of grants. For the first time in several years, the committee did not insist on a specific number of new and competing grants, although it did recommend funding "approximately 6,500." The report states:

"The committee continues to give the highest priority to the support of investigator initiated research projects and intends that the amounts in the bill should be used to fund approximately 6,500 new and competing projects (including AIDS) at levels as close as possible to the levels recommended by the peer review groups who evaluate and approve the individual proposals. The bill also includes funds to support 13,660 noncompeting research projects. While the committee recognizes that the amounts provided are not sufficient to fund all grants at the full amounts approved, it has added substantial amounts of funds to the President's request so that the amount of downward negotiation can be kept to a minimum. The committee believes this policy balances the goal of a sustained level of new and continuing projects with the practical limits of available funds in FY 1988."

<>Office of Management & Budget interference, including the odious practice of "apportionment."

"Beyond expressing its specific directions with respect to numbers of grants and policies on downward negotiations, the committee has attempted to minimize its directions to the institutes regarding the specific allocations related to individual diseases or research mechanisms. It is the committee's view that these decisions are best made by the scientists and the science managers at NIH based on the quality of the opportunities as they present themselves

during the year... "The committee is concerned by recent changes in the Office of Management & Budget apportionment process as it relates to NIH. These apportionments are being made in FY 1987 at the mechanism or program level rather than by account or appropriation as is the traditional practice. This has had the practical effect of involving OMB in decisions about NIH science which go beyond the financial control and accountability issues which are the basis for the apportionment requirements.

"The committee understands that this change in apportionment procedures may have been imposed because of the statutory floor on the number of new and competing grants contained in the bill in FY 1986 and FY 1987. This is one of the principal reasons why the committee is recommending that the number of grants not be included in the bill for 1988 but has instead included bill language precluding multiyear or forward funding of grants in FY 1988. In concert with this change, and with the overall policy of giving maximum flexibility to NIH in managing its programs, the committee directs that NIH funds be apportioned under the normal executive branch procedures--that is at the appropriation level."

Thus, the committee would bar by statutory action (by language in the bill itself) the multiyear and forward funding gimmicks OMB has injected into the budget issues the last two years. But the committee stopped short of forbidding apportionment in the bill, rather electing to get OMB off NIH directors' backs by the directive in the committee report. This does not have the force of law, but if the Senate includes a similar directive in its committee report, OMB would be foolhardy to ignore it.

<>Construction. For the first time in many years, the House bill includes no money for extramural construction grants. The White House has not asked for construction money for years, but Congress has always saved that part of the program by putting some in. The NCI bypass budget for FY 1988 asked $35 million for construction and renovation. Here's how the committee explained its action:

"The question of federal support for the construction of health science facilities is one of the most complicated biomedical research support issues facing Congress. This question involves a variety of subquestions including how one measures the need for such assistance, what share of this need the federal government should assume, what mechanisms could best be used to channel federal aid to construction and how funds, if available, should be allocated among competing institutions. These questions have been further complicated by recent studies by the National Science Foundation which surveyed the research community and found a large amount of construction in the life and medical sciences fields currently underway, mostly financed from nonfederal sources.

"There is no general authority currently available for construction through there is authority for such assistance in three of the 12 institutes (including NCI). Pending a review of this matter by the authorizing committees, including both the Science & Technology Committee and the Energy & Commerce Committee (which includes the Health & Environment Subcommittee), no funds have been included in this bill for extramural construction in FY 1988. The committee expects the (NIH) director to review this issue prior to the FY 1989 hearings and to be prepared to discuss this problem including the role of the indirect cost mechanism for financing capital costs."

Questions Have Been Considered

It was somewhat of a surprise that the committee decided to leave out construction money altogether. Cancer Program constituents and House and Senate members' own constituents have made the case in favor of construction support repeatedly over the years.

There is an impressive number of institutions around the country which have fine cancer research facilities because of federal support. Most of them used the government money as leverage to raise far more on their own. In the cancer field, at least, that can explain why the National Science Foundation survey came up with its finding.

Other answers to the committee's questions were provided in the survey conducted four years ago with funds provided by Armand Hammer, chairman of the President's Cancer Panel, and the American Cancer Society. That survey formed the basis for NCI's bypass budget requests; it found a glaring need for new facilities and upgrading and renovation of existing ones.

The question on what mechanism should be used should not apply when cancer research facilities are being considered. NCI has a smooth working and efficient mechanism, the Research Facilities Branch in the Div. of

Cancer Prevention & Control, and with review of the applications by ad hoc committees convened by the Div. of Extramural Activities.

Among those institutions counting on at least some NCI seed money for major projects next year are the Fred Hutchinson Cancer Center in Seattle, the Univ. of Nebraska, the Univ. of Wisconsin, Memorial Sloan-Kettering Cancer Center in New York, and the Univ. of Colorado. Also, the Univ. of Southern California is planning a major new addition to its cancer center and is hoping to help its fund raising efforts with an NCI grant.

The committee's action appears to play into the hands of the Administration, which has been trying to kill all support for biomedical research facilities.

With renewal of biomedical research authorization coming up next year, HHS has asked that all construction authority be stripped from NIH, specifically NCI's and the two other institutes with that authority.

The committee's "subquestions," on how the need is measured (that's what peer review is for); what share the federal government should assume (NCI requires 50-50 split, but the grantee almost always raises far more than that); and how funds should be allocated among competing institutions (that's what priority scores are for) are nonquestions as far as NCI is concerned.

Committee members may have been turned off by the action of Senate Majority Leader Robert Byrd in bypassing peer review and earmarking construction money directly for the Mary Babb Randolph Cancer Center at West Virginia Univ. That was not the first time that had been done, however, and in most of the other cases, they helped in the development of first rate cancer centers.

<>Instrumentation grants.

"The committee has over the years provided substantial resources toward developing the infrastructure of biomedical science. One element of this effort has been to contribute resources so that the modern instruments of science are available to individual investigators. The need for such support has been highlighted by the National Academy of Sciences and by NIH. Two separate programs exist to address this need. First, the Div. of Research Resources supports a shared instruments program which provides large, expensive equipment such as magnetic resonance devices or electron microscopes which can be shared by different investigators throughout a science center. The bill includes approximately $36 million for these instruments. Second, the bill includes approximately $19 million for small instruments appropriated among the various institutes. These pieces of equipment, generally fall in a price range of from $5,000 to $60,000 and can be used in a wide variety of projects by a single investigator or a single lab."

<>Training, centers, clinical trials.

"The committee believes the amount recommended is sufficient to maintain the current number of research trainees (11,000) and to provide for a modest expansion in the number of research centers (currently 550). The inflationary increase provided should allow for a maintenance of clinical trial activity including approximately $40 million for new trials."

<>Gene mapping.

"The committee is aware that many scientists are now engaged in a concerted effort to map or pinpoint the specific location of genes on chromosomes, especially those genes responsible for inherited disorders. Researchers have already mapped many genes and have found the approximate locations of the genes for Huntington's disease, Duchenne's muscular dystrophy, retinoblastoma, some forms of manic depressive illness, cystic fibrosis and Alzheimer's disease. Finding these genes will allow researchers to make copies of them for study, to learn what protein each gene makes, to understand ways to treat disorders that arise from defects in the proteins, and perhaps even to replace defective genes. However, mapping genes on the chromosomes of complex organisms and determining the order or sequence in which chemical units are arranged present major challenges. The committee believes that the provision of additional funds will enable scientists to make considerable progress in the amount of genetic material they are currently able to map and to map genes much more rapidly. An amount of $30 million has been provided for the National Institute of General Medical Sciences to expand efforts in gene mapping."

<>Animal facilities and alternatives to animals in research.

"The committee is pleased to note that considerable progress is being made in the improvement of both extramural and intramural facilities for laboratory animals. In 1985, the Div. of Research Resources

initiated a new dollar for dollar matching program to help extramural institutions upgrade their animal facilities and develop centralized programs of animal care in support of their biomedical research programs. These grants enable institutes to comply with the Animal Welfare Act and the PHS Policy of Humane Care and Use of Laboratory Animals. The committee has provided $15 million for this program in FY 1988. Within the NIH intramural program, construction and renovation of various animal facilities is under way and the projected completion date for all construction is early 1989.

"In addition the committee strongly supports efforts to develop alternative research methodologies which will reduce the use of animals, particularly primates, in experiments. These alternatives involve a variety of approaches which include use of computer technology and use of standardized tissue banks. This effort should be given high priority iby NIH in FY 1988."

<>Health and behavior research.

"The committee would like to reiterate its strong support for increased health and behavior research at NIH. The 1987 report submitted by NIH at the committee's request illustrates the importance of health and behavior research in the prevention and treatment of disease and in the promotion of health. NIH supported research shows, for example, that behavior and lifestyle play a significant role in controlling high blood pressure, stabilizing insulin levels in diabetes, lessening osteoporosis in the elderly through exercise, and reducing the use of alcohol, tobacco and drugs. The committee is encouraged that NIH increased its support of health and behavior research to $147 million in FY 1986, but notes that this amount still represents less than three percent of the total NIH budget. The committee believes that the potential payoff from increased health and behavior research, in terms of reduced mortality and morbidity and the associated social and economic costs warrants an intensified effort by NIH to support this type of research. The recommendations of the Surgeon General in 'Healthy People' and of the Institute of Medicine in 'Health and Behavior' provide a blueprint for additional research on the behavioral and social factors in the treatment and prevention of disease. Accordingly, the committee again urges NIH to direct each of its research institutes to expand its portfolio of health and behavior research, and to be prepared to discuss this matter with the committee during the FY 1989 hearings."

<>Nutrition information.

"Several of the agencies funded in the bill support important research involving human nutrition. The committee wishes to renew its concern that the federal government should speak with one voice when it issues dietary information and nutritional guidance to the public. The committee expects all agencies to coordinate such acitivities with the appropriate agencies in the Dept. of Agriculture."

<>Biomedical research inflation.

"One of the most difficult decisions faced by the committee in making funding recommendations for NIH has been what level of funding adjustments is necessary to provide for inflation in biomedical research activities and to maintain current services in NIH programs. This task is complicated by the mix of different research mechanisms, changes in the average size of projects, shifts in grantee and reviewer behavior regarding amounts of funding requested and approved, and by different systemic approaches to the current services question. The result is a wide variation in estimates with the Congressional Budget Office and the NIH current services or 'baseline' estimates varying by more than $350 million. The recommendations of the committee for FY 1988 are based on an averaging of these estimates. The committee does not believe, however, that it has sufficient information regarding the underlying basis for cost increases at NIH and requests that the Comptroller General conduct a study of this issue. This study should review the growth in NIH funding over the last five to seven years with special emphasis on differentiating the main reasons for cost increases including real program expansion vs. price growth. This review should include all components of both direct and indirect cost as well as overhead costs at NIH. The committee requests that this report be completed by Feb. 1, 1988."

The report's section on NCI summarized briefly certain areas of research progress. It is more notable for what it did not include:

*Any directives whatever on how NCI should allocate its funds.

*No mention that any part of the increase

over the President's request should go to increase the number of Community Clinical Oncology Programs. So much for the efforts of the Assn. of Community Cancer Centers, at least on the House side, to get $10 million addded to the program so that the number of awards could be increased substantially over the 50 now planned.

*No mention that any part of the increase over the President's budget should go to the Cancer Centers Program, although as noted above in the NIH section of the report it did note that some money was included to support a "modest expansion" in the total number of centers supported by all of NIH. So much for the efforts of the American Assn. of Cancer Institutes, at lease on the House side, to get $20 million added for centers.

*No reference to any part of the increase as intended to put more money into cancer control, whose budget has been as flat as Twiggy for most of the 80s. Like the centers and community program advocates, cancer control supporters struck out again in this inning, although there are some more at bats to come.

It is not too late to work on Senators, who will be home this month.

The committee did make one suggestion which, mild as it was, did provide a little direction. Expressing concern over the increase in the incidence of malignant melanoma and the prevalence of all types of skin cancer, the report encouraged NCI to "increase its research activity in this area. The Cancer Institute should consider the establishment of a national program of prevention in this area and should be prepared to testify regarding the feasibility of such a program when it appears for the FY 1989 hearings."

References throughout the report to "the committee" ostensibly were to the full Appropriations Committee. However, the complete, printed report and bill were available immediately after the full committee acted on the bill presented by the Labor-HHS-Education Appropriations Subcommittee, chaired by William Natcher (D-Ky). That indicated that no changes were made from the subcommittee's markup or report.

RFAs Available

RFA 87-CA-30

Title: Manipulation of the suppressor arm of the immune response directed towards successful human immunotherapy

Application receipt date: Nov. 16

NCI's Div. of Cancer Treatment invites grant applications from investigators for basic and applied studies to investigate manipulation of the suppressor arm of the immune response directed toward successful human immunotherapy.

The immune system is highly complex, composed of different types of cells located in various central and peripheral lymphoid organs. The complex immunologic network can affect, among other responses, the growth of cancer cells. In certain animal models, tumors can be demonstrated to be antigenic and to be rejected on the basis of immune responses to these antigens. This potentially beneficial host response can, however, be inhibited by the development of suppressor functions which may be present as part of the normal physiologic process by which immune responses are regulated. Thus, a tumor which could otherwise be rejected escapes immunologic elimination because of the normal inhibitory regulatory system.

Several groups have identified the subtypes of suppressor lymphocytes in animal models and have demonstrated that the suppressor arm of the immune response can be abolished or diminished with significant antitumor effects. As elegant as these studies are, however, they are very difficult to translate into practical therapy for cancer patients. It is very hard to establish whether individual tumors in humans are antigenic, a critical point since it is principally with antigenic tumors that specific suppressor modulation might be expected to be successful. The detailed mode of action of certain agents such as cyclophosphamide which affect the suppressor arm of the immune response are poorly understood. Convincing in vitro systems that measure suppressor effects in cancer tumor systems are rare, and most of the animal models that measure suppressor cell phenomena do so by in vivo measurement of progressive tumor growth. Finally, in animal models, the inhibition of suppressor cell function can only be carried out in a precisely timed manner with regard to the growth of tumor, a restriction not easily possible in humans. Despite all these difficulties, attempts to regulate the suppressor phase of the immune response in humans so as to achieve a successful antitumor effect should be investigated.

The goal of this research is to obtain information from preclinical systems that would lead to successful manipulation of the suppressor arm of the immune response so as to enhance a destructive immunologic attack on malignant tumors. New agents that can decrease suppressor cells should be sought.

Known examples of such agents include cyclophosphamide, cimetidine, cyclooxygenase inhibitors and deoxyguanosine. The cellular and molecular mechanisms of action of such agents should be explored. For reasons which are unclear, suppressor T cell subsets appear to be more susceptible than effector T cell subsets to a number of these agents. Also desirable would be the establishment of innovative animal models to explore the role of suppressor cells in cancer biology. This could include therapy of ultraviolet radiation induced and carcinogen induced autochthonous tumors. For example, UV radiation in vivo suppresses the immune response systemically. Investigation of the mechanisms by which this occurs could provide information about how suppressor cells are produced in vivo. In order to be responsive to this RFA, the application should include some experiments which are designed to demonstrate cancer regression in a therapy model. Although the major intent of this RFA is to encourage preclinical modeling studies, appropriately designed clinical trials, based on preclinical data, would also be accepted.

The sum of $500,000 has been set aside for first year funding of an anticipated three to four grants. The concept from which this RFA was derived was

approved by the DCT Board of Scientific Counselors in February and was reported in the Feb. 27 issue of The Cancer Letter.

For copies of the complete RFA, contact Dr. Ira Green, Biological Resources Branch, BRMP, DCT, NCI-FCRF, Bldg 426 Rm 1, Frederick, MD 21701, phone 301/698-1098.

RFA 87-CA-28

Title: Immunologic investigation of multi drug resistance of neoplastic cells

Application receipt date: Nov. 16

The emergence of drug resistant cancer cells during chemotherapy continues to be a major problem. During the past 10 years, a new system, termed multidrug cross resistance (MDR) has been defined which in part explains a major aspect of the drug resistance of cancer cells. When a tumor cell becomes resistant to one class of drug, usually a natural product, the same cell also demonstrates resistance to another class of unrelated drugs, including synthetic compounds. This type of resistance is due to the increased cell membrane expression of a 170,000 dalton glycoprotein which controls the permeability and efflux of drugs from the cell such that cells with a large amount of this protein are able to expel the drug at a faster rate. The protein has been called the P-glycoprotein (P-170). The gene for P-170 has been cloned and the amino acid sequence of the protein is known. Exactly how the presence of increased amounts of P-170 in the cell membrane of resistanat cells leads to decreased drug concentration within the cell remains to be fully understood.

Recently, several groups have produced monoclonal antibodies to P-170. These antibodies can be used to identify cells and tissues bearing increased amounts of P-170 and to affect the function of P-170.

The goal of this research is to develop immunologic methods that will lead to a further understanding of the mechanism of action of P-170 and to interfere with its function of cancer cells with the long term aim of producing favorable clinical therapeutic effects.

Studies are encouraged which will:

1. Produce new monoclonal antibodies against P-170.

2. Identify the functional domains of P-170 by production of monoclonal antibodies to polypeptides from different domains of the molecule and testing of these antibodies for effectiveness in inhibiting growth of multidrug resistant cells and drug binding or drug efflux from cells.

3. Use monoclonal antibodies to study receptor function of P-170. Here the fate of the drug P-170 conjugate, exocytosis, coated pit localization, breakdown of the conjugate and P-170 recycling should be examined.

4. To investigate how other drugs, e.g., Ca channel blocking agents which can partially overcome MDR interact with P-170, such as whether certain MABs block the association between Ca channel blocking agents and P-170.

5. To use MABs to establish if P-170 molecules exist as a family of molecules.

6. To use MABs to inhibit growth of human drug resistant xenografts in a suitable nude mouse model system.

7. Use MABs to screen tumor tissues to correlate elevated levels of P-170 with drug resistance in patients.

8. To test P-170 as a target for therapy with MABs coupled to toxins or to I-131 in vitro and in animal models with the ultimate aim of use in patient therapy.

9. To develop T cell and other types of cell mediated immunity to P-170 bearing cells in animal models and in vitro.

DCT anticipates awarding three to four grants, and has set aside $500,000 for first year funding of the five year awards. The concept from which this RFA was derived was approved by the DCT Board of Scientific Counselors in February and was reported in the Feb. 27 issue of The Cancer Letter.

For complete copies of the RFA, contact Dr. Ira Green (address and phone as with the previous RFA above).

RFA 87-CA-29

Title: Protection of bone marrow against the effects of cytotoxic drugs and X-irradiation

Application receipt date: Nov. 16

One of the limiting features of cancer treatment using standard cancer chemotherapy and X-irradiation is damage to the bone marrow leading to the absence of peripheral blood and tissue leukocytes necessary for host defense against infectious agents. In addition, such damage to bone marrow causes failure of RBC and platelet production. Various agents protect the bone marrow against some of these deleterious effects. Recent preliminary studies with cytokines such as IL-1, G-CSF, GM-CSF, IL-2 and gamma interferon have indicated that these can also protect against the detrimental effects of X-irradiation and of chemotherapy. The detailed mechanism of action and full potential of these agents are still to be explored.

To develop basic preclinical information that will aid in the development of clinical use of bone marrow protecting agents in cancer therapy is the goal of this RFA. It is intended to foster research in animal models to explore these questions. Models in which normal animals or tumor bearing animals are treated with standard anticancer treatment and then treated with bone marrow protecting agents at various times relative to the standard therapy would provide useful information prior to human use of such strategies. Detailed studies of peripheral blood and organ counts of various hematopoietic cell types would be indicated. Also, colony forming abilities of cells contained within bone marrow and other blood forming organs should be performed. The above could also be integrated with in vitro models of hematopoiesis, such as Dexter and/or Witte-Whitlock cultures. Such cultures could also be employed to study effects of lymphokines and/or other bone marrow protecting agents at a cellular and molecular level on hematopoiesis and on stromal cells and their interaction with hematopoietic progenitor cells. Considering that many patients who receive cancer therapy die as a result of infectious disease, the possible effects of bone marrow protecting agents, in particular lymphokines such as the CSFs, on infectious disease could also be studied in the animal models.

Also encouraged would be the study of combinations of known lymphokines and CSFs and other protecting agents, and the discovery of entirely new lymphokines and biologic response modifiers that might mediate such effects. The discovery of any defined agent of any kind that could have similar protective effects on bone marrow would be highly desirable. Finally, since other rapidly proliferating tissue, such as cells of the gastrointestinal tract, is also damaged by cancer chemtherapy and X-irradiation, the protective effects of the above agents or of other agents could be explored in this regard.

While exploring mechanisms of protective action, it is extremely important in these applications that endpoints measuring anticancer effects should also be included.

DCT has set aside $500,000 for first year funding of three to four five year grants. The concept from which this RFA was derived was approved by the DCT Board of Scientific Counselors last February and reported in the Feb. 27 issue of The Cancer Letter.

For complete copies of the RFA, contact Dr. Ira

Green, address and phone as listed with the first RFA.

RFA 87-CA-31

Title: Evaluation of early cancer detection: retrospective studies
Application receipt date: Oct. 23

NCI's Div. of Cancer Prevention & Control invites grant applications from investigators interested in elucidating one or more intermediate end points through analyses of existing data to enable the evaluation and to assess the extent of benefit of early cancer detection.

Intermediate end points are needed that can be evaluated rapidly and reliably and which have a known link to the subsequent development of cancer. These end points will enable NCI to evaluate the impact of prevention and early cancer detection research without the need for long term followup and high cost associated with randomized clinical trial depending solely on mortality as an outcome.

The scope of this RFA is limited to the analyses of existing data bases in populations that have been exposed to various screening and health maintenance procedures with information concerning early detection, diagnosis, and patient followup.

It is the intent of this RFA to identify intermediate end points that can be used to assess the contributions of early cancer detection, whether initiated by patient or physician.

Applicants are encouraged to submit letters of intent and to consult with NCI program staff before submitting applications because of the need for a clear understanding of the cancer control research issues involved and to facilitate planning for the review of applications.

DCPC anticipates making up to four awards as a result of this RFA and has set aside $812,000 for first year funding.

The concept from which this RFA was derived was approved by the DCPC Board of Scientific Counselors in May and reported in the May 22 issue of The Cancer Letter.

Requests for copies of the complete RFA and letters of intent should be addressed to Bill Bunnag, PhD, Program Director, Early Detection Branch, CCO, DCPC, NCI, NIH, Blair Bldg Rm 7A-05, Bethesda, MD 20892, phone 301/427-8708.

RFPs Available

Requests for proposals described here pertain to contracts planned for award by the National Cancer Institute unless otherwise noted. NCI listings will show the phone number of the Contracting Officer or Contract Specialist who will respond to questions. Address requests for NCI RFPs, citing the RFP number, to the individual named, the Blair building room number shown, National Cancer Institute, NIH, Bethesda MD 20892. Proposals may be hand delivered to the Blair building, 8300 Colesville Rd., Silver Spring MD, but the U.S. Postal Service will not deliver there. RFP announcements from other agencies will include the complete mailing address at the end of each.

RFP NCI-CP-EB-85603-57

Title: Epidemiologic surveys for human retroviruses
Deadline: Approximately Oct. 1

This is a recompetition of a contract presently held by the Medical Research Council of London.

Objectives of this project are (1) to conduct surveys of the occurrence of human retroviruses in relationship to malignancy by collecting sera and other samples for seroligic and virologic analysis from epidemiologically defined study populations; (2) to chart the distribution of HTLV-1 in relationship to leukemia/lymphoma and other disease outcomes focusing in areas suspected to be HTLV-1 endemic;, (3) to explore the role of HIV as a cofactor for virally associated cancer in Africa; and (4) to search for new human retroviruses suspected on the basis of epidemiologic or serologic evidence.

Project sites will be targeted by NCI and the principal investigator based on the potential for exploring or settling specific questions. Choice of study sites will be based on new data contacts with local scientists with access to study populations and through results of ongoing studies in a specific locale with unexpected findings.

Under this acquisition the contractor shall be responsible for (a) consultations and collaborations with NCI project officers, other investigators designated by the PO and officials of international health organizations as directed by the PO; (b) surveys of existing and new sera; (c) data and specimen collections; (d) quality control and standardization; and (e) laboratory resources of the PI

It is anticipated that a single award will be made for a period of five years with the anticipated award scheduled for February 1988. The Div. of Cancer Etiology has set aside $300,000 for first year funding of the contract and estimated similar amounts for each of the five years. There are no limitations on the geographic location of the contractor.

In order to be considered, the contractor must meet the three sets of requirements and specifications with regards to institutional (corporate) requirements, institutional experience and personnel requirements. These will be detailed in the solicitation package which will be forwarded upon request. A primary restriction will be the noninterchangeability of the key personnel (substitutions of key personnel after award or resignation of key personnel may be cause for termination and recompetition of the contract).

The concept from which this RFP was derived was approved by the DCE Board of Scientific Counselors last March and reported in the March 13 issue of The Cancer Letter.

Contract Specialist: Trina Porter
RCB Blair Bldg Rm 114
301/427-8888

RFP NCI-CO-74110-40

Title: Cancer Communications Program evaluation
Deadline: Approximately Sept. 15

This project is for the evaluation of current cancer education programs. The data will be used for improving program messages and materials. The project also includes conducting the Consumer Survey of Consumer Education Project on Diet and Cancer, and the tracking of outcome evaluation studies.

The offeror must have, or demonstrate it will have at the time of source selection, a computer system compatible with the NBI System 64-4000 and which is capable of communicating with that system.

This proposed contract is a 100 percent small business set aside.

Contract Specialist: Teresa Baughman
RCB Blair Bldg Rm 314
301/427-8877

The Cancer Letter _Editor Jerry D. Boyd Associate Editor Patricia Williams

Published forty-eight times a year by The Cancer Letter, Inc., P.O. Box 2370, Reston, Virginia 22090. Also publisher of The Clinical Cancer Letter.